

[What is claimed is]

1. A digital integrated apparatus capable of storing documentary image data corresponding to some specific document input from a facsimile receiving means as a documentary image input means, by attaching document ID identifying the documentary image data in at least one kind of storing means controlling attribute information containing that document ID with document management means, and outputting specified documentary image from output means based on said document ID as required, comprising:

a document ID encoding means for generating document ID mark corresponding to said document ID when storing documentary image data corresponding to said specific document in said storing means,

a pattern synthesizing means for synthesizing document ID mark produced by said document ID encoding means and documentary image data corresponding to said specific document,

said output means for outputting documentary image with document ID mark generated by said pattern synthesizing means, while storing it in said storing means, and said document management means for automatically storing documentary image received by said facsimile receiving means.

2. A digital integrated apparatus capable of storing documentary image data corresponding to some specific document input from at least one kind of documentary image input means by attaching document ID identifying the documentary image data in at least one kind of storing means controlling attribute information containing that document ID with document management means, and outputting specified documentary image from output means based on said document ID as required, comprising:

a document ID encoding means for generating document ID mark corresponding to said document ID when storing documentary image data corresponding to said specific document in said storing means,

a pattern synthesizing means for synthesizing document ID mark produced by said document ID encoding means and documentary image data corresponding to said specific document, and

said output means for outputting documentary image with document ID mark generated by said pattern synthesizing means, while storing it in said storing means, wherein said documentary image includes only the attribute information of said specific document.

3. A digital integrated apparatus as defined in Claim 1, wherein all pages of said specific document are output together with said documentary image with document ID mark.

4. A digital integrated apparatus capable of storing documentary image data corresponding to some specific document input from at least one kind of documentary image input means by attaching document ID identifying the documentary image data in at least one kind of storing means controlling attribute information containing that document ID with document management means, and outputting specified documentary image from output means based on said document ID as required, comprising: a document ID encoding means for generating document ID mark corresponding to said document ID when storing documentary image data corresponding to said specific document in said storing means, a pattern synthesizing means for synthesizing document ID mark produced by said document ID encoding means and documentary image data corresponding to said specific document, and said output means for outputting documentary image with document ID mark generated by said pattern synthesizing means, wherein only said documentary image with document ID mark is output.

5. A digital integrated apparatus as defined in Claim 4, wherein said documentary image input means is an image reading means.

6. A digital integrated apparatus as defined in Claim 4, wherein said documentary image input means is a facsimile receiving means.

7. A digital integrated apparatus as defined in Claim 4, wherein said documentary image input means is a facsimile transmitting means.

8. A digital integrated apparatus as defined in Claim 3, wherein said documentary image input means is a printed image receiving means from a computer.

9. A digital integrated apparatus capable of storing documentary image data corresponding to some specific document input from at least one kind of documentary image input means by attaching document ID identifying the documentary image data in at least one kind of storing means controlling attribute information containing that document ID with document management means, and outputting specified documentary image from output means based on said document ID as required, comprising: an image reading means as said document image input means, a document ID encoding means for generating document ID

mark corresponding to said document ID when storing
documentary image data corresponding to said specific
document in said storing means,
a pattern synthesizing means for synthesizing document ID
5 mark produced by said document ID encoding means and
documentary image data corresponding to said specific
document,
said output means for outputting documentary image with
document ID mark generated by said pattern synthesizing
10 means, and
said document management means for instructing output from
said image reading means to be input directly in the
pattern synthesizing means and a documentary image
corresponding to said specific document to be printed out
15 form the output means.

10. A digital integrated apparatus capable of
storing documentary image data corresponding to some
specific document input from at least one kind of
documentary image input means by attaching document ID
20 identifying the documentary image data in at least one kind
of storing means controlling attribute information
containing that document ID with document management means,
and outputting specified documentary image from output
means based on said document ID as required, comprising:
25 an image reading means as said document image input means,
a document ID encoding means for generating document ID
mark corresponding to said document ID when storing
documentary image data corresponding to said specific
document in said storing means,
30 a pattern synthesizing means for synthesizing document ID
mark produced by said document ID encoding means and
documentary image data corresponding to said specific
document,
said output means for outputting documentary image with
35 document ID mark generated by said pattern synthesizing
means, and
said document management means for submitting the
documentary image of a first part directly to the pattern
synthesizing means, while submitting the documentary image
40 of a second part and after which is taken out from said
storing means, to the output means.

11. A digital integrated apparatus as defined in
any one of claims 2, 4, or 9,
wherein said document ID encoding means outputs document ID
45 mark and position information including a form size and
layout position to the pattern synthesizing means, and
wherein said pattern synthesizing means determines

a. position of the document ID mark based on said position information.

12. A digital integrated apparatus as defined in Claim 11, wherein the size of said cover original and the direction of contents of document management led by said document management means are input from a original size detecting means for detecting size and direction of original.

13. A digital integrated apparatus as defined in Claim 11, wherein the size of original registered by said document management means is input from a original size detecting means for detecting size of original, while the direction of contents of document is input from an input/output device.

14. A digital integrated apparatus capable of storing documentary image data corresponding to some specific document input from at least one kind of documentary image input means by attaching document ID identifying the documentary image data in at least one kind of storing means controlling attribute information containing that document ID with document management means, and outputting specified documentary image from output means based on said document ID as required, comprising:
a document ID encoding means for generating document ID mark corresponding to said document ID when storing documentary image data corresponding to said specific document in said storing means,
a pattern synthesizing means for synthesizing document ID mark produced by said document ID encoding means and documentary image data corresponding to said specific document,
said output means for outputting documentary image with document ID mark generated by said pattern synthesizing means, while storing it in said storing means, and
a dialogue type operating means capable of judging whether or not to add a documentary ID mark to the documentary image output from said output means.

15. A digital integrated apparatus capable of storing documentary image data corresponding to some specific document input from at least one kind of documentary image input means by attaching document ID identifying the documentary image data in at least one kind of storing means controlling attribute information containing that document ID with document management means, and outputting documentary image specified based on said document ID, by adding document ID mark corresponding to said document ID, from output means as required,

comprising:

a documentary image reading means for reading ID mark printed on said documentary image with document ID mark,

5 a document ID decoding means for decoding the read document ID mark into document ID, and

said document management means for specifying, for the purpose of some specific processing, documentary image corresponding to either the document ID obtained from document ID decoding means or the document ID input in character string directly from an input/output device, based on the selection a user makes with the input/output device between document ID mark input or character string input.

15 16. A digital integrated apparatus as defined in Claim 15, wherein said specific processing is take-out of document by the output means.

17. A digital integrated apparatus as defined in Claim 16, comprising a document ID mark encoding means for generating document ID mark based on said document ID to the documentary image taken out as a result of said take-out of document, and a pattern synthesizing means for combining said generated document ID mark and the target documentary image and transferring it to the output means.

25 18. A digital integrated apparatus as defined in Claim 17, wherein said document ID encoding means outputs document ID mark and position information including a form size layout position to the pattern synthesizing means, and

30 wherein said pattern synthesizing means determines a position of the document ID mark based on said position information.

19. A digital integrated apparatus as defined in Claim 15, wherein said specific processing is copying or moving of target documentary image data from specific type of storing means to other specific type of storing means.

40 20. A digital integrated apparatus as defined in Claim 15, comprising said document management means for transmitting to at least said input/output device, upon receipt of document ID corresponding to some specific document, a plural number of attribute information mutually linked to said specific document, in the case where said document management means controls the link information indicating that specific documentary image and other documentary image are related to each other in contents, and

said input/output device for displaying the attribute information obtained from said document

management means to the user for selection so that the user may select the target documentary image.

21. A digital integrated apparatus as defined in Claim 15, wherein said specific processing is combination for mutually combining a plural number of documentary image data by the document management means.

22. A digital integrated apparatus as defined in Claim 21, wherein said document management means generates in-document link information for mutually relating a plural number of documentary image data and registering it on attribute management table.

23. A digital integrated apparatus as defined in Claim 15, wherein said specific processing is deletion for deleting target documentary image data by the document management means.

24. A digital integrated apparatus as defined in Claim 23, wherein reuse of deleted document ID is prohibited.

25. A digital integrated apparatus as defined in Claim 15, comprising a facsimile receiving means as said documentary image input means, and

a facsimile transmitting means as output means, said document ID decoding means decoding the document ID mark attached to the documentary image received from the facsimile, and the document management means outputting image data corresponding to specific document, based on the document ID obtained as a result of said decoding, to a facsimile in a distant place through said facsimile transmitting means.

26. A digital integrated apparatus as defined in Claim 25, comprising said document ID encoding means for generating a second document ID mark in a readable size by reading a first document ID attached to the documentary image received from the facsimile according to the user's instruction from the output/input device, and

a pattern synthesizing means for combining the generated second document ID mark with the target documentary image and transferring them to the output means.

27. A digital integrated apparatus as defined in Claim 26, comprising said document ID encoding means for generating document ID mark corresponding to the document ID including password input according to the user's instruction from the input/output device.

28. A digital integrated apparatus as defined in Claim 26, comprising an input/output device capable of setting the number of output copies for all pages of

documentary image with document ID mark corresponding to specific documentary image and/or documentary image.

29. A document processing system capable of storing documentary image data corresponding to some specific document input from a facsimile receiving means as a documentary image input means, by attaching document ID identifying the documentary image data in at least one kind of storing means controlling attribute information containing that document ID with document management means, and outputting specified documentary image from output means based on said document ID as required, comprising:

a document ID encoding means for generating document ID mark corresponding to said document ID when storing documentary image data corresponding to said specific document in said storing means,

a pattern synthesizing means for synthesizing document ID mark produced by said document ID encoding means and documentary image data corresponding to said specific document,

said output means for outputting documentary image with document ID mark generated by said pattern synthesizing means, while storing it in said storing means, and

said document management means for automatically storing documentary image received by said facsimile receiving means.

30. A document processing system capable of storing documentary image data corresponding to some specific document input from at least one kind of documentary image input means by attaching document ID identifying the documentary image data in at least one kind of storing means controlling attribute information containing that document ID with document management means, and outputting specified documentary image from output means based on said document ID as required, comprising:

a document ID encoding means for generating document ID mark corresponding to said document ID when storing documentary image data corresponding to said specific document in said storing means,

a pattern synthesizing means for synthesizing document ID mark produced by said document ID encoding means and documentary image data corresponding to said specific document, and

said output means for outputting documentary image with document ID mark generated by said pattern synthesizing means, while storing it in said storing means, wherein said documentary image includes only the attribute information

of said specific document.

31. A document processing system as defined in Claim 29, wherein all pages of said specific document are output together with said documentary image with document ID mark.

32. A document processing system capable of storing documentary image data corresponding to some specific document input from at least one kind of documentary image input means by attaching document ID identifying the documentary image data in at least one kind of storing means controlling attribute information containing that document ID with document management means, and outputting specified documentary image from output means based on said document ID as required, comprising:

a document ID encoding means for generating document ID mark corresponding to said document ID when storing documentary image data corresponding to said specific document in said storing means,

a pattern synthesizing means for synthesizing document ID mark produced by said document ID encoding means and documentary image data corresponding to said specific document, and

said output means for outputting documentary image with document ID mark generated by said pattern synthesizing means, wherein only said documentary image with document ID mark is output.

33. A document processing system as defined in Claim 32, wherein said documentary image input means is an image reading means.

34. A document processing system as defined in Claim 32, wherein said documentary image input means is a facsimile receiving means.

35. A document processing system as defined in Claim 32, wherein said documentary image input means is a facsimile transmitting means.

36. A document processing system as defined in Claim 31, wherein said documentary image input means is a printed image receiving means from a computer.

37. A document processing system capable of storing documentary image data corresponding to some specific document input from at least one kind of documentary image input means by attaching document ID identifying the documentary image data in at least one kind of storing means controlling attribute information containing that document ID with document management means, and outputting specified documentary image from output means based on said document ID as required, comprising:

an image reading means as said document image input means,

a document ID encoding means for generating document ID mark corresponding to said document ID when storing documentary image data corresponding to said specific document in said storing means,

5 a pattern synthesizing means for synthesizing document ID mark produced by said document ID encoding means and documentary image data corresponding to said specific document,

10 said output means for outputting documentary image with document ID mark generated by said pattern synthesizing means, and

said document management means for instructing output from said image reading means to be input directly in the pattern synthesizing means and a documentary image corresponding to said specific document to be printed out form the output means.

38. A document processing system capable of storing documentary image data corresponding to some specific document input from at least one kind of documentary image input means by attaching document ID identifying the documentary image data in at least one kind of storing means controlling attribute information containing that document ID with document management means, and outputting specified documentary image from output means based on said document ID as required, comprising:

25 an image reading means as said document image input means, a document ID encoding means for generating document ID mark corresponding to said document ID when storing documentary image data corresponding to said specific document in said storing means,

30 a pattern synthesizing means for synthesizing document ID mark produced by said document ID encoding means and documentary image data corresponding to said specific document,

35 said output means for outputting documentary image with document ID mark generated by said pattern synthesizing means, and said document management means for submitting the documentary image of a first part directly to the pattern synthesizing means, while submitting the documentary image of a second part and after which is taken out from said storing means, to the output means.

39. A document processing system as defined in any one of claims 30, 32, or 37,

45 wherein said document ID encoding means outputs document ID mark and position information including a form size and layout position to the pattern synthesizing means, and

wherein said pattern synthesizing means determines a position of the document ID mark based on said position information.

40. A document processing system as defined in Claim 39, wherein the size of said cover original and the direction of contents of document management led by said document management means are input from a original size detecting means for detecting size and direction of original.

41. A document processing system as defined in Claim 39, wherein the size of original registered by said document management means is input from a original size detecting means for detecting size of original, while the direction of contents of document is input from an input/output device.

42. A document processing system capable of storing documentary image data corresponding to some specific document input from at least one kind of documentary image input means by attaching document ID identifying the documentary image data in at least one kind of storing means controlling attribute information containing that document ID with document management means, and outputting specified documentary image from output means based on said document ID as required, comprising:

a document ID encoding means for generating document ID mark corresponding to said document ID when storing documentary image data corresponding to said specific document in said storing means,

a pattern synthesizing means for synthesizing document ID mark produced by said document ID encoding means and documentary image data corresponding to said specific document,

said output means for outputting documentary image with document ID mark generated by said pattern synthesizing means, while storing it in said storing means, and

a dialogue type operating means capable of judging whether or not to add a documentary ID mark to the documentary image output from said output means.

43. A document processing system capable of storing documentary image data corresponding to some specific document input from at least one kind of documentary image input means by attaching document ID identifying the documentary image data in at least one kind of storing means controlling attribute information containing that document ID with document management means, and outputting documentary image specified based on said document ID, by adding document ID mark corresponding to said document ID,

from output means as required, comprising:

a documentary image reading means for reading ID mark printed on said documentary image with document ID mark,

5 a document ID decoding means for decoding the read document ID mark into document ID, and

said document management means for specifying, for the purpose of some specific processing, documentary image corresponding to either the document ID obtained from document ID decoding means or the document ID input in character string directly from an input/output device, based on the selection a user makes with the input/output device between document ID mark input or character string input.

15 44. A document processing system as defined in Claim 43, wherein said specific processing is take-out of document by the output means.

45. A document processing system as defined in Claim 44, comprising a document ID mark encoding means for generating document ID mark based on said document ID to the documentary image taken out as a result of said take-out of document, and a pattern synthesizing means for combining said generated document ID mark and the target documentary image and transferring it to the output means.

25 46. A document processing system as defined in Claim 45, wherein said document ID encoding means outputs document ID mark and position information including a form size layout position to the pattern synthesizing means, and

wherein said pattern synthesizing means determines a position of the document ID mark based on said position information.

47. A document processing system as defined in Claim 43, wherein said specific processing is copying or moving of target documentary image data from specific type of storing means to other specific type of storing means.

48. A document processing system as defined in Claim 43, comprising said document management means for transmitting to at least said input/output device, upon receipt of document ID corresponding to some specific document, a plural number of attribute information mutually linked to said specific document, in the case where said document management means controls the link information indicating that specific documentary image and other documentary image are related to each other in contents, and

said input/output device for displaying the attribute information obtained from said document

management means to the user for selection so that the user may select the target documentary image.

49. A document processing system as defined in Claim 43, wherein said specific processing is combination for mutually combining a plural number of documentary image data by the document management means.

50. A document processing system as defined in Claim 49, wherein said document management means generates in-document link information for mutually relating a plural number of documentary image data and registering it on attribute management table.

51. A document processing system as defined in Claim 43, wherein said specific processing is deletion for deleting target documentary image data by the document management means.

52. A document processing system as defined in Claim 51, wherein reuse of deleted document ID is prohibited.

53. A document processing system as defined in Claim 43, comprising a facsimile receiving means as said documentary image input means, and

a facsimile transmitting means as output means, said document ID decoding means decoding the document ID mark attached to the documentary image received from the facsimile, and the document management means outputting image data corresponding to specific document, based on the document ID obtained as a result of said decoding, to a facsimile in a distant place through said facsimile transmitting means.

54. A document processing system as defined in Claim 53, comprising said document ID encoding means for generating a second document ID mark in a readable size by reading a first document ID attached to the documentary image received from the facsimile according to the user's instruction from the output/input device, and

a pattern synthesizing means for combining the generated second document ID mark with the target documentary image and transferring them to the output means.

55. A document processing system as defined in Claim 44, comprising said document ID encoding means for generating document ID mark corresponding to the document ID including password input according to the user's instruction from the input/output device.

56. A document processing system as defined in Claim 54, comprising an input/output device capable of setting the number of output copies for all pages of

documentary image with document ID mark corresponding to
specific documentary image and/or documentary image.